Management Review

Occupational Safety and Health (OSH), Environmental Management (EMS) and Self Assessment (SA)

Annual Meeting Minutes 2003

BNL Collider-Accelerator Department

Question #1: Are the OSH/EMS/SA programs effective in achieving the following policy commitments?

- Compliance?
- Pollution prevention?
- Injury/Illness reduction?
- Community outreach?
- Clean-up?
- Continual improvement?

Answer to #1:

<u>Compliance</u>: EMS Audit for FY03 found programs in compliance. ISO 14001-Certificate of Registration re-issued. Compliance audits (PCB, Air Emissions, Spill Response, Tank and Outdoor Storage) have been addressed.

Pollution Prevention examples in FY03 include:

C-A legacy lead (456 cu.ft) shipped

Forty liters of activated mercury drained and shipped to ORNL

Using spent resins as filler in waste shipping bins

Burned 4,800 gallons of oil at steam plant

Decayed air-handler filters in storage

120 cu.ft of compactable waste saved

Soil Coupon Program implemented

P2 Proposal for digital equipment for NSRL

There is a need to add caps over activated soils and remove PCB capacitors at the Linac.

<u>Injury/Illness reduction</u>: Examples of improvements in Injury Management include: Supervisor training for reporting and follow-up of occupational injuries

New procedure developed to address aspects of restricted duty /injury management

C-AD proactively implementing OSHA ILO-OSH-2001 guidelines

WOSH Committee established to review injury issues

In the area of injury prevention, a need to repair the roof in building 912 and fix the pot holes in the parking lots and walkways. In addition, to prevent slips and falls an improved response to snow-storms is required.

<u>Community Outreach</u>: The Department continues to actively participate in the community outreach program. Presently, the focus is on the g-2 tritium plume.

Clean-up examples in FY03 include:

Building 912 cleanup efforts are approximately 20% complete
Four legacy tankers cut-up (240 cu.ft) shipped
Eleven pieces of old Cosmotron magnets (700 cu.ft) awaiting shipment
Two B-52 bins filled with steel and collimator magnets (624 cu.ft) shipped
One cement cask loaded with 23 old targets (60 cu.ft) shipped
One cement cask loaded with legacy magnet and old targets (60 cu.ft) shipped
SREL magnet dismantled (669 cu.ft.) and characterized, awaiting shipment
Four beam separators loaded internally with legacy steel (1056 cu.ft), awaiting shipment

Continual Improvement examples in FY03 include

PLC upgrades for tritiated water- system upgrades
Sealed floors at building 1005 to comply with Article 12 requirements
New Radioactive Material Storage Building constructed
Retaining wall to stabilize slope at Booster
Booster storm pipe capped and filled
Indoor containment and storage for tankers
Replaced defective self-reading dosimeters
Implemented new web-base Lockout/Tagout system

Comments on Question #1:

A question by Y. Makdisi, C-A Injury/Illness objective is to be within 40% of DOE average. Have we not slipped past this objective?

E. Lessard responded because we did slip above the 40% Injury/Illness objective we created the new OSH Management System, which is intended to monitor, and measure OSH hazards and performance associated with injury/illness incidents and provide prevention and corrective action feedback.

A question by F. Dusek, what is being done about the ice and snow on the parking lots and walkways? Are we allowed to shovel or have barrels of sand available for spreading over the surfaces?

E. Lessard responded that discussions with Plant Engineering revealed manpower restraints and other priorities prevent them from removing snow from all facilities, in a timely manner. Once snow levels reach 6 inches and above, roadways become the main

focus. Perhaps the laboratory should consider closing the lab when snow is predicted to reach that level? However, it is believed that having sand barrels in-place does not violate any union rules.

Question #2: Are the OSH/EMS/SA programs effective in achieving the objectives and performance measures?

Answer to #2: Yes, all objectives and performance measures have been met. C-A has operated within regulatory requirements and integrated pollution prevention and waste minimization in the management decision processes.

Question #3: Are the OSH/EMS/SA programs adequate in terms of:

- Identifying significant environmental aspects and impacts?
- Identifying significant occupational safety and health hazards?
- Resource allocation?
- Information systems?
- Organizational issues
 - Staff expertise?
 - Procedural requirements?

Answer to #3:

In addition, to identifying and evaluating significant environmental aspects, C-A has included significant OSH aspects in 2003. To determine OSH aspects, workplace hazards analyses and risk assessments were performed for C-A facilities (Accelerators, Experimental Areas, Shops and Offices). This process identified the following significant OSH aspects: ionizing radiation, non-ionizing radiation, hazardous or toxic materials, radioactive materials, electrical energy, explosive gases and liquids, oxygen deficiencies, kinetic energy, potential energy, thermal energy and cryogenic temperatures. The OSH program has been created and is in its infancy stage. and is expected to progress well.

C-A ESHQ resources are at absolute minimum to support expectations.

Fire protection upgrades have started but are proceeding slow.

BNL needs to standardize the OSH Management System lab-wide.

Training compliance, information systems and information transfer actions remain adequate. The C-A organization has appropriate environmental, OSH training and procedure management expertise.

Comment on Question #3:

A question by T. Kirk, when accidents or near misses occur outside of C-A, why isn't the Lessons Learned program tracking them to identify a trend? (This question was prompted

by BNL Site Notification e-mail, stating that because of laser misuse an eye injury had occurred in another Department, resulting in a BNL-wide Stop Work Action.)

O. White responded, that the Lessons Learned Program presently does not provide this service. However, the overall Lessons Learn Program should be enhanced to provide lab personnel with a better communication tool.

Question #4: Are the objectives and performance measures for OSH/EMS/SA programs suitable in terms of:

- Environmental impacts and current conditions?
- Occupational hazards and current conditions?
- Concerns of stakeholders?
- Current and future regulatory requirements?
- Business interests?
- Technology capability?
- Internal organizational or process changes?
- Should additional measures be established?

Answer to #4:

Objectives are needed for OSHA-related facility changes and there is a continuing need to streamline/integrate OSH/EMS/SA programs.

Comments on Question #4:

- D. Lowenstein had the following remarks:
- Besides working safely, I am making Good Housekeeping a condition of employment in C-A. Each C-A Group shall set aside time each Friday afternoon, before leaving for the weekend, to clean up their work areas and some particular office areas.
- We need to consider cleaning up the steel and other debris on Railroad Avenue.
- We should concentrate on cleaning up "Inner Mongolia".
- Personnel responsible for work activities at RHIC should be aware of DEC Regulations.
- The Particle Post should include information on work related statistics and Lesson Learn items.
- BNL should identify the individual responsible for leading the effort on external regulations.

• Plant Engineering should be encouraged to use an outside supplier to install the Fire Alarm System.

T. Kirk had the following remarks:

- There should be a new emphasis on items that impact safety, such as the Fire Protection System, which is a major concern.
- The laboratory should focus on improving the Lessons Learn process to include trending issues that have the potential of creating severe hazards in the work place.

Question #5: Are there recommended revisions to:

- OSH policy and commitments?
- Environmental policy and commitments?
- Self-assessment policy and commitments?
- Objectives and performance measures?
- Elements of OSH?
- Elements of EMS?
- Elements of SA?

Answer to #5:

BNL level strategy is needed for "equivalence" (i.e. preparing technical justifications where appropriate) in order to meet OSHA and NRC rules and regulations.